Letter to the Editor

First published online 26 December 2017

The New Zealand breakfast cereal category is dynamic and responsive to consumer preferences

Madam

We write this letter in response to a short communication entitled 'The nutritional quality of New Zealand breakfast cereals: an update', published in the December 2017 issue of this journal⁽¹⁾. There are a number of misrepresentations of the New Zealand breakfast cereal category in the communication that need to be addressed by the authors.

Breakfast cereals contribute valuable nutrients to the *Kiwi diet*

There is a statement in the introduction of the communication that many breakfast cereals are 'energy-dense and nutritionally poor'⁽¹⁾. This statement cannot be substantiated. In fact, many, if not most, ready-to-eat cereals are nutrient rich, containing 25% of the recommended dietary intake for many B vitamins, folate and Fe. Breakfast cereal is one of the best sources of dietary Fe for both Kiwi adults and children^(2,3). It is also well known that breakfast cereal eaters have higher nutrient intakes than those who skip or eat other foods for breakfast⁽⁴⁾. They are also more likely to meet their fibre targets⁽⁴⁾. Many readyto-eat cereals, oats and muesli products are high in whole grains and often contain nuts and seeds, which further contribute to their intrinsic nutritional value.

The communication also states that many cereals in the New Zealand market are high in fat⁽¹⁾. There are very few breakfast cereal products in the market that would qualify as 'high in fat', for which there is no criterion for measurement in New Zealand. The highest mean fat content in Table 1 in the communication is for muesli at 16.5% or less than 8 g per 45 g serving. In addition, less than one-third of the total fat is coming from saturated fat, indicating the use of non-saturated sources of fat by manufacturers.

Cereal manufacture and labelling are regulated under the Australia New Zealand Food Standards Code

The introduction to the communication also implies that there is no governance of breakfast cereal manufacture or labelling in New Zealand other than under Standard 1.2.7 in the Australia New Zealand Food Standards Code⁽¹⁾:

"There is no regulation of formulation, labelling or promotion of breakfast cereals in NZ. However, Food Standards Australia New Zealand (FSANZ)

implemented Standard 1.2.7 in 2016, which requires that health claims be present only on foods meeting a Nutrient Profile Scoring Criterion (NPSC) score of <4.'

This is not the case for regulation in New Zealand. The nutrition labelling of all breakfast cereals in New Zealand is strictly regulated under Standard 1.2.8 of the Code⁽⁵⁾. In conjunction, the addition of vitamins and minerals is regulated in Standard 1.3.2 and there are other stipulated requirements for cereals in Standard 2.1.1. There are further requirements which manufacturers must meet for allergen warnings and advisory statements as well as the use of novel ingredients. What is more, not all cereals are required to meet NPSC as part of Standard 1.2.7. Since nutrient content claims are governed under this standard, and do not require a passing of the NPSC.

Mean energy, total fat and saturated fat are not reliable indicators of the healthfulness of the category

The increases in mean total fat and energy in flakes and muesli shown in Table 1 of the communication would not come as a surprise to many working in food development in the cereal category. The use of ingredients with more whole grains, nuts and seeds is evident across the category, largely due to innovation. This would explain increases in energy, total fat and saturated fat in products that were generally low in fat and saturated fat to begin with. In fact, when it comes to flakes, puffs and bubbles, there is little opportunity to increase fat in these products other than with the addition of nuts, seeds and wholegrain clusters. Growth in granola and muesli, which are largely oat based and incorporate nuts and seeds, is also evident with the New Zealand market showing 30% growth over the last 5 years⁽⁶⁾. The addition of coconut to many cereals, which is also based on consumer demand, contributes to the fat and saturated fat contents.

Therefore, an increase in the mean energy, total fat or saturated fat content of the category is not a reliable indicator of a negative change in healthfulness. In fact, if anything, the ingredient profiles of many cereals have been improved with the use of more whole ingredients having healthier fat profiles.

With respect to changes in protein in this category, it is not realistic to look for significant changes in a category that is largely grain based. The addition of nuts can help together with soya crisps and pea protein, but this is likely to be in a small group of variants. It is therefore unlikely that protein in this category will shift very much over time.



A bowl of breakfast cereal is physically unable to exceed daily nutrient targets

The discussion section of the communication explicitly states that a serving of breakfast cereal exceeds recommended intakes for sugar, Na and fat⁽¹⁾:

'Unlike the USA, there appears to be little impetus in either Australia or New Zealand to reformulate breakfast cereal into a healthier product, despite the fact that one bowl of cereal can exceed the recommended dietary intake of sugar, Na and fat.'

The Daily Values (DV) or Reference Intakes used in the Food Standards Code are 90 g for sugars, 2300 mg for Na and 70 g for fat, with 24 g of that from saturated fat based on a diet of $8368 \text{ kJ/d} (2000 \text{ kcal/d})^{(5)}$. It is unlikely that a bowl of cereal would exceed these amounts, especially since one serving is likely to be between 30 and 45 g of cereal. Even two servings of any cereal product would not reach the DV. In fact, a breakfast cereal with 30% sugar would provide 9 g of sugar per serving, which equates to 10% of the 90 g DV for sugar.

The original communication references the 'added sugar or free sugars' recommendation from the WHO (10% of energy intake from 'added or free' sugars) as the 'recommended dietary intake for total sugars'⁽¹⁾. Even in applying this recommendation correctly, it would equate to approximately 50 g of added sugars for adults, 25 g for young children and up to 50 g for teenagers. There is currently no cereal that would reach those levels of added sugar in a serving or even in two servings. What is more, the most recent national nutrition surveys in New Zealand showed that breakfast cereals contribute less than 3% of total daily sugar intakes in New Zealand adults⁽²⁾ and 3% in children⁽³⁾.

This is also true for fat and saturated fat, given that the DV are 70 g and 24 g, respectively. There is no cereal on the market that would exceed 70 g of fat or 24 g of saturated fat in a serving, particularly since the serving size is likely to be between 30 and 45 g.

The same logic would then apply to Na with a serving of cereal supplying under 200 mg, which equates to approximately 10% of the suggested dietary target⁽⁷⁾.

The statement from the communication listed above is not factual and is void of reality.

Reformulation in the category has been happening for decades and is still continuing

The definition of reformulation according to the Oxford Dictionary is to 'formulate again or differently'. This assumes that you are changing an already existing product. To address reformulation, you would have to examine the same products over time. Addressing reformulation performance based on mean nutrient intakes assumes a level of stability in the market, a stability that we cannot guarantee. In addition, the methodology used in the communication is likely to dilute intra-individual variances over time. This, combined with the shifting sample group, makes this assessment of reformulation problematic.

The authors of the original communication do acknowledge that individual reformulations were not possible to assess, which makes the conclusion that cereal manufacturers are not doing anything to reformulate their foods a rather broad assumption⁽¹⁾. Using average changes in nutrient contents across a dynamic category, to draw this conclusion, is prone to error. In fact, it is likely that there was rapid innovation taking place in this category over the last 5 years. This is evident from the entry of new brands, which is not recognised in the communication and could explain changes in mean intakes.

The breakfast cereal category has changed substantially over the years. Na has been reduced across the category in line with recommendations; some of the largest brands in New Zealand have reduced their sugar content⁽⁸⁾ and manufacturers are adding more whole ingredients such as whole grains, nuts and seeds. All of this contributes to diverse and nutritious options becoming available to the New Zealand market.

The communication has made a number of untrue and misleading statements about the breakfast cereal category and the authors need to provide clarity for readers around their conclusions, particularly those statements regarding cereal exceeding recommended intakes.

Acknowledgements

Financial support: This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors. *Conflict of interest:* Dr Gina Levy, a qualified dietitian, is employed as the Senior Nutrition Manager for Australia and New Zealand for the Kellogg Company. She is remunerated for her work as a permanent employee of the company. *Authorship:* G.S.L. is the sole author of this letter. *Ethics of human subject participation:* Not applicable.

> Gina Simone Levy Research and Technology Kellogg Australia New Zealand 41–51 Wentworth Avenue Pagewood, NSW 2035, Australia Email: gina.levy@kellogg.com

References

- 1. Chepulis L, Hill S & Mearns G (2017) The nutritional quality of New Zealand breakfast cereals: an update. *Public Health Nutr* **20**, 3234–3237.
- Ministry of Health (2010) 2008/09 New Zealand Adult Nutrition Survey data tables. https://www.health.govt.nz/ publication/2008-09-new-zealand-adult-nutrition-survey-datatables (accessed November 2017).
- 3. Ministry of Health (2003) NZ Food NZ Children. Key Results of the 2002 National Children's Nutrition Survey. Wellington: Ministry of Health.

Letter to the Editor

- 4. Williams PG (2014) The benefits of breakfast cereal consumption: a systematic review of the evidence base. *Adv Nutr* **5**, issue 6, 636S–673S.
- Food Standards Australia New Zealand (2015) Food Standards Code. http://www.foodstandards.gov.au/code/Pages/ default.aspx (accessed November 2017).
- Information Resources (Australia) Pty Ltd (2017) IRI Market-Edge National Grocery – MAT Ending 02/07/17. Auckland: IRI Australia.
- 7. National Health and Medical Research Council Australia (2016) Nutrient Reference Values for Australia and New Zealand, Sodium. Update 1.1 Revision of Sodium. Canberra: Commonwealth of Australia.
- 8. news.com.au (2015) Nutri-Grain cuts the crap with new and improved recipe. http://www.news.com.au/lifestyle/food/eat/nutrigrain-cuts-the-crap-with-new-and-improved-recipe/news-story/ddcc77f9fd1d59b880bb636fb0f093a1 (accessed October 2017).